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| APPLICATION NO.                              | FILING DATE        | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO. |
|--|--------------------|----------------------|--------------------------|------------------|
| 10/002,159                                   | 12/05/2001         | Richard C. Van Hall  | 02890041AA 2291          |                  |
| 7055   | 55 7590 03/03/2006 |                      | EXAMINER                 |                  |
| GREENBLUM & BERNSTEIN, P.L.C.                |                    |                      | LE, BRIAN Q              |                  |
| 1950 ROLAND CLARKE PLACE<br>RESTON, VA 20191 |                    |                      | ART UNIT                 | PAPER NUMBER     |
| 11251011, 11                                 |                    |                      | 2621                     |                  |
|  |                    |                      | DATE A A M ED 02/02/2006 |                  |

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Application No.      | Applicant(s)         |  |  |  |  |
|--|---|----------------------|----------------------|--|--|--|--|
| Office Action Summary  |   | 10/002,159           | VAN HALL, RICHARD C. |  |  |  |  |
|  |   | Examiner             | Art Unit             |  |  |  |  |
|  |   | Brian Q. Le          | 2623                 |  |  |  |  |
|  | The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply |                      |                      |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                      |                      |  |  |  |  |
| Status   |   |                      |                      |  |  |  |  |
| 1)[🔀   | Responsive to communication(s) filed on 19 De   | ecember 2005         |                      |  |  |  |  |
|  |   | action is non-final. |                      |  |  |  |  |
| ′=   | ·—  |                      |                      |  |  |  |  |
| -,-  | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                             |                      |                      |  |  |  |  |
| Dispositi  | on of Claims  |                      |                      |  |  |  |  |
| 4)⊠  | ☑ Claim(s) <u>1-29</u> is/are pending in the application.   |                      |                      |  |  |  |  |
| •  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |                      |                      |  |  |  |  |
|  | Claim(s) <u>17-21</u> is/are allowed.   |                      |                      |  |  |  |  |
| ·  | Claim(s) <u>1-16 and 22-29</u> is/are rejected.   |                      |                      |  |  |  |  |
|  |   |                      |                      |  |  |  |  |
| ·  | Claim(s) are subject to restriction and/or election requirement.  |                      |                      |  |  |  |  |
|  | Application Papers  |                      |                      |  |  |  |  |
| 9) The specification is objected to by the Examiner.   |   |                      |                      |  |  |  |  |
| •  | •   |                      | Evaminor             |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |   |                      |                      |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |                      |                      |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                      |                      |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |                      |                      |  |  |  |  |
| _  | <u> </u>  |                      |                      |  |  |  |  |
| _  | 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).                       |                      |                      |  |  |  |  |
| a)L  | a) All b) Some * c) None of:  |                      |                      |  |  |  |  |
|  | 1. Certified copies of the priority documents have been received.   |                      |                      |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |                      |                      |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |                      |                      |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the partition explice not received.   |   |                      |                      |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |                      |                      |  |  |  |  |
|  |   |                      |                      |  |  |  |  |
| Attachment(s)  |   |                      |                      |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |   |                      |                      |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  Notice of Informal Patent Application (PTO-152)  |   |                      |                      |  |  |  |  |
| Paper No(s)/Mail Date 6) Other:  |   |                      |                      |  |  |  |  |

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### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/19/2005 has been entered.

2. The objection of claims 26 and 27 is withdrawn.

# Response to Amendment and Arguments

3. Applicant's arguments, see "Remarks", filed 12/19/2005, with respect to the rejection(s) of claim(s) 1-8, 11-13, 16 and 22-29 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Halmann et al. 6,526,163.

## Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 25 and 29 are rejected under 35 U.S.C. 101 because the preamble "A machine readable medium ....comprising the steps of:" of claim 25 is non-statutory because the terminology "A machine readable medium" (emphasis added) alone has no set definition. A statutory product with descriptive material must include a positive recitation of the computer readable medium -- MPEP 2106, case law, USTPO policy, all are founded on this.

Claims not specifically addressed depend from indefinite antecedent claims.

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# Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-8, 11-13, 16 and 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Iizuka et al. U.S. Patent No. 5,485,561 and Halmann et al. U.S. Patent No. 6,526,163.

As to claim 1, Iizuka discloses a method for communicating area information in a common framework implemented on hardware (FIG. 10), comprising the steps of:

providing to the hardware a first set of instructions (expression defines relation) which generates an area of interest (AOI) defined by a first geometric shape (region of interest is drawn according to common and shape variables) (abstract);

defining with the hardware the first geometric shape by one or more coordinates (FIG. 4; FIG. 5 and FIG. 6);

converting with the hardware the one or more coordinates to a second set of coordinates for use with a second set of instructions different than the first set of instructions, wherein the second set of coordinates is defined by a new AOI which includes information associated with the first set of instructions and which is interpreted by the second set of instructions (second region of interest is calculated by the common variables of the first region of interest).

Iizuka does not explicitly teach the concept of "wherein the common framework provides that different recognition AOI systems, each using its own set of conventions for describing area

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information, is compatible with one another. Halmann futher teaches a method of communicating area information on a hardware (ultrasound system) wherein the common framework provides that different recognition AOI systems (different/multiple processors operate differently to from area of interest), each using its own set of conventions for describing area information, is compatible with one another (abstract and FIG. element 302). Modifying Iizuka's method for communicating area information according to Halmann would able to utilize different processors/systems for parallel processing to maximize the processor usage and operating systems efficiently (column 2, lines 40-65). This would improve processing and therefore, it would have been obvious to one of the ordinary skill in the art to modify Iizuka according to Halmann.

As to claim 2, Iizuka discloses the method of claim 1, wherein the new AOI associated with second set of instructions define a second geometric shape (abstract).

Regarding claims 3 and 4, Iizuka teaches inherently accounts for the first and second geometric shapes to be both the same and different (FIG. 2).

As to claim 5, Iizuka teaches that the first geometric shape is more constrained than the second geometric shape. (the process of draw and redrawn to generate more constrained geometric shape).

Regarding claim 6, Iizuka discloses wherein the first and the second geometric shape is one of a bounding box, a parallelogram, a rectangle and a polygon (square) (FIG. 2).

With regard to claim 7, Iizuka discloses the method of claim 6, wherein the bounding box is more constrained than the parallelogram, the rectangle and the polygon. Note that claim 6 presents a number of shapes in the alternative, wherein the Examiner has chosen one of them,

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namely the polygon. In this case, claim 7 merely further defines one of the alternatives that were not chosen, and therefore claim 7 is properly rejected on the basis of the rejection of claim 6.

Regarding claim 8, Iizuka discloses the method of claim 2, wherein the one or more coordinates and the second set of coordinates are at least one point which defines the first geometric shape and the second geometric shape, respectively (FIG. 2 and FIG. 3).

As to claim 11, Iizuka discloses the method further comprising the step of translating the second geometric shape by a predetermined amount compared to the first geometric shape (shifting geometric shape) (FIG. 13, S10).

As to claim 12, Iizuka discloses the method of claim 2, further comprising the step of scaling (enlarge) the second geometric shape by a predetermined amount compared to the first geometric shape (FIG. 12, "3:Enlarge").

As to claim 13, Iizuka discloses the method of claim 12, wherein the step of scaling is performed in at least one of a vertical (Y) and horizontal direction (X) (since the coordinate system is Cartesian, e.g., X, Y coordinates, any scaling would occur in one of the two directions).

Regarding claim 16, Iizuka discloses the method of claim 2, wherein the step of defining the first geometric shape includes the steps of determining whether the first geometric shape includes one of: (i) at least three points; (ii) a distinct starting point, fast end point and a slow end point; (iii) a non-zero distance between a starting point and a fast end point; and (iv) a non zero area (any polygon/square having more than three points would be determined, column 9, lines 41-48; also, any polygon/square that is not a point or line, would have a non zero area).

With regard to claim 22, please refer back to claim 1 for the teaching and explanation.

Regarding claim 23, following the same line of reasoning as for claim 3 and claim 5, the second AOI space is the same shape or is more constrained than the initial AOI space.

Claim 24 is drawn to a system which corresponds to the method of claim 1. The discussion applied above for claim 1 is applicable to claim 24. The system is shown, for example, in Fig. 10 of Iizuka. Additionally, Iizuka 's method is intended to run on a computer, hardware, or a combination of hardware and software (Fig. 10).

Claim 25 is drawn to a machine readable medium which corresponds to claim 1. The discussion applied above for claim 1 is applicable to claim 25. Iizuka 's method is intended to run on a computer, or a combination of hardware and software (Fig. 10). In the computer or software, the machine readable medium containing code is inherent.

For claims 26-29, Iizuka discloses a method wherein the new AOI defines a bounded area shape and wherein, after the converting, the first geometric shape is bounded or constrained by the bounded area shape (abstract).

## Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 9, 10, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Iizuka et al. U.S. Patent No. 5,485,561 and Halmann et al. U.S. Patent No. 6,526,163, applied to claim 2 above, and further in view of Wang U.S. Patent No. 4,701,752.

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Regarding claim 9, Iizuka does not explicitly teach the method further comprising the step of rotating the second geometric shape by a predetermined amount compared to the first geometric shape. Wang further teaches a method of further process an image processing wherein the generated mirror image (second image) is rotated by a predetermined amount (according to the pointing cursor position) (abstract and FIG. 7, element 34). Modifying Iizuka's method of communicating area information according to Wang would able to rotate the images for further processing. This would improve processing and therefore, it would have been obvious to one of the ordinary skill in the art to modify Iizuka according to Wang.

Regarding claim 10, Wang further teaches the method wherein the step of rotating is performed at an origin (at an axis) (column 4, lines 1-10). In addition, to utilize a specific axis of rotation is considered an arbitrary decision, up to the desires of the user or designer, and thus is not considered a patentable distinction.

As to claim 14, Wang discloses mirroring points of a second geometric shape compared to a first (Figs. 2 and 3). The mirroring occurs about the horizontal axis. Wang states that mirroring can advantageously provide a dramatic effect on displayed graphics (column 1, lines 33-36).

Regarding claim 15, Wang further discloses the method of claim 2, further comprising the step of orienting the second geometric shape differently than the first geometric shape (when rotating, column 6, lines 45-47, the second shape would be oriented differently than the first).

#### Allowable Subject Matter

10. Claims 17-21 are allowed.

### **Contact Information**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q. Le whose telephone number is 571-272-7424. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on 571-272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BL February 22, 2006

